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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,682	03/09/2004	Arnaud Farizon	PF030046	4907

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JOSEPH S. TRIPOLI
THOMSON LICENSING INC.
2 INDEPENDENCE WAY
P.O. BOX 5312
PRINCETON, NJ 08543-5312

EXAMINER

MACCHIAROLO, PETER J

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,682

Applicant(s)

FARIZON ET AL.

Examiner

Peter J. Macchiarolo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/09/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Acknowledged Receipt

2. Receipt of the Preliminary Amendment to the claims filed 03/09/2004 is acknowledged. Claims 1-8 are hereby pending.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 03/09/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. The Examiner notes reference AB listed on the IDS, USPN "4141441," is a typographical error of "4151441."

Drawings

4. Figures 3 and 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not

accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The abstract of the disclosure is objected to because it does not conform to the standard language requirements. Correction is required. See MPEP § 608.01(b).
6. Applicant is reminded of the proper language and format for an abstract of the disclosure.
7. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.
8. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

9. **Claim 7 is objected to because of the following informalities:**
10. Regarding claim 7, the terms, "the indentation" and "the extension" lack antecedent basis. For the purpose of examination, the Examiner reads, "an indentation" and "an extension." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. Claim 1 recites the limitation "the width L" in line 9. There is insufficient antecedent basis for this limitation in the claim. However, for Examination purposes, the Examiner is interpreting L" as the width of the end of the side arms as shown in Applicant's figure 7. The remaining claims are rejected because of their dependency.

13. Claim 2 recites the limitation, "the metal plates," however, there is not proper antecedent basis for this claim limitation. Furthermore, the limitation, "metal plates partially surrounding the eyelets of the cathodes being all three of substantially identical weight," is not clear. For the purpose of examination, the Examiner is interpreting this to mean three metal plates are fashioned identical to the metal plate in claim 1, and each plate partially surrounds a separate cathode.

14. Claim 5 recites a rejoin of width L'. This is unclear and the Examiner is turning to figure 7 for clarification and examination purposes.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

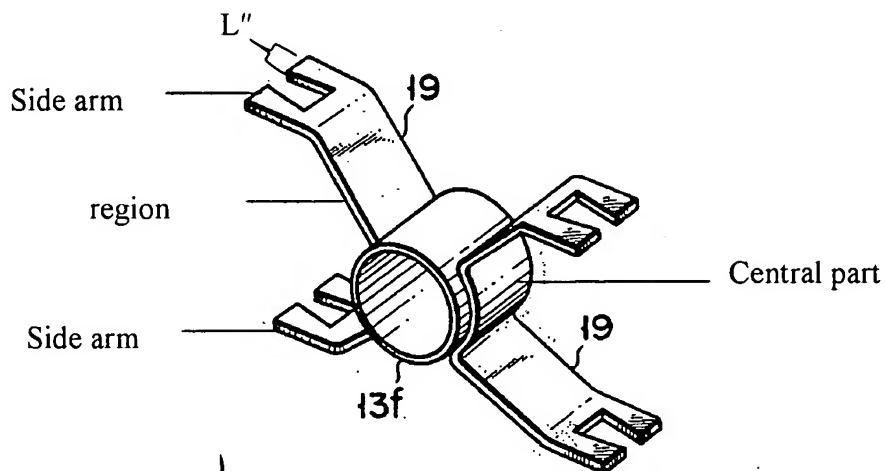
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by

Applicant cited Takanashi et al (USPN 4071803; “Takanashi”).

16. Regarding claim 1, Takanashi shows in figure 5, an electron gun comprising at least one emissive cathode (13e) of substantially tubular shape, held in place using support means comprising: an eyelet (13f) surrounding the cathode, and a first metal plate (19) substantially parallel to the longitudinal axis Z of the gun comprising a central part (see below) folded so as to partially surround the eyelet and two side arms (see below) extending on each side of the central part, wherein a region (below) connecting the central part to the side arms have, in the direction of the longitudinal axis, a width L which is greater than the end width (L'') of the side arms in the same direction.



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17. Regarding claim 8, Takanashi discloses in column 1, lines 1-12, that this electron gun is to be used in a CRT. The remaining limitations therein have been previously addressed above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 1, 2, 4, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant cited Puhak et al (USPN 4151411; "Puhak") in view of Nagao (USPN 3772558; "Nagao").

19. Regarding claim 1, Puhak shows in figures 5a and 6, an electron gun comprising at least one emissive cathode of substantially tubular shape, held in place using support means comprising: an eyelet (67a) surrounding the cathode, and a first metal wire rod (63) substantially parallel to the longitudinal axis Z of the gun comprising a central part (73) folded so as to partially surround the eyelet and two side arms (62b, 67b) extending on each side of the central part, wherein a region connecting the central part to the side arms have, in the direction of the longitudinal axis, a width L which is greater than the end width of the side arms in the same direction.

20. Puhak is silent to the support means being a plate.

21. However, Nagao teaches in column 1, lines 9-28, that metal plates offer more surface area at attachment points, thereby better holding cathodes in place than do metal rods.

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22. Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use metal plates, instead of metal rods to allow for a more secure cathode arrangement.

23. Regarding claim 2, Puhak shows in figure 6, the electron gun comprises three emissive cathodes, and three metal rods (61) partially surrounding the eyelets of the two other cathodes being identical to the first metal rod.

24. Puhak is silent to the support means being a plate.

25. However, Nagao teaches the use of a plate.

26. The motivation and reason to combine is the same for claim 1.

27. Regarding claim 4, Puhak shows in figure 5a, the arms comprise at their end, a part (71, 72) folded so as to form an angle of less than 180° .

28. Regarding claim 6, Puhak shows in figure 5b that the central part is indented.

Furthermore, Nagao shows the central part is indented. The reason to combine is the same for claim 1.

29. Regarding claim 7, Puhak shows in figure 5b that an indentation is located in an extension of the side arms. Furthermore, Nagao shows an indentation is located in an extension of the side arms. The reason to combine is the same for claim 1.

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30. Regarding claim 8, Puhak discloses in column 1, lines 6-17 that the electron gun is to be used in a CRT. The remaining limitations therein have been previously addressed above.

Allowable Subject Matter

31. Claims 3 and 5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

32. The following is a statement of reasons for the indication of allowable subject matter:

33. Regarding claim 3, the prior art of record fails to disclose or motivate the width of the side arms is less than half the overall size L of the metal plate, in combination with the remaining limitations of the claim.

34. Regarding claim 5, the prior art of record fails to disclose or motivate the central part has a region of width L' which is less than the width of the connection regions, in combination with the remaining limitations of the claim.

Conclusion

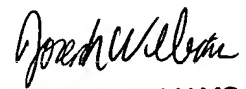
35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375. The examiner can normally be reached on 8:30 - 5:00, M-F.

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37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571) 272-2475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'PJW', is located in the lower-left area of the page.A handwritten signature in black ink, appearing to be 'Joseph Williams', is located in the lower-right area of the page.
JOSEPH WILLIAMS
PRIMARY EXAMINER